


# Collider-Accelerator Department

## FY 2006 Self-Assessment Report

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1-05-2007  
Date


Approved by:

  
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## **I. Self-Assessment Program**

The objective of the C-A self-assessment program is to provide a systematic approach to performance management. That is, to provide C-A management with information needed to ensure organizational performance objectives are being met and appropriate improvement actions are identified and implemented.

Supporting information for the objectives of Critical Outcome 1.0, Basic Science & Technology, are reported in the BNL Integrated Planning Management System. This system provides the data required for the preparation of BNL Appendix B Self Evaluation Reports.

C-A Self-Assessment supporting documentation; e.g., [Program and Facility](#), [Organization](#), [ESHQ Division](#), [Assessment and Inspection Programs](#), [C-A Environmental Management Program](#), [C-A Occupational Safety and Health \(OSH\) Management System](#), [Authorization Basis Documents](#), [Operations and Procedures Manual](#), [Conduct of Operations Agreement](#), [Training Programs and Associated Records](#) and [Tier 1 Safety Inspections](#), are maintained on the Collider-Accelerator web site.

The C-A Department has adopted a self-assessment framework primarily based on the Malcolm Baldrige National Quality Award Criteria, which are as follows:

- Leadership Commitment and Involvement
- Human Resource Development and Management
- Customer Focus and Satisfaction (Customer Value)
- Process Management
- Business and Operational Results
- Compliance with Laws Regulations and Contractual Requirements

## **II. Evaluation of Objectives and Measures**

For each of the assessment criteria stated above, C-AD has established appropriate objectives and performance measures. The C-A FY 2006 Self-Assessment Program Matrix containing these objectives and performance measures is attached.

- For those measures/targets listed in the matrix, results are documented in the matrix.
- For those objectives and targets listed C-A OPM 14.1, Environmental Management Plan for C-AD and SMD Operations and C-A OPM 14.30, OSH Management Plan for C-AD and SMD Accelerators, Experimental Areas, Shops and Offices, results are documented in the C-A Family ATS (3017)

A brief summary of C-A performance items, which were not captured in the matrix, are listed below.

### **1. Occurrence Reports, Nonconformance Reports and Investigations**

- a. Reportable occurrence trends are documented in the [C-A Performance Indicator](#) quarterly reports.

- b. Ten Nonconformance Reports (NCR) were issued in FY06. Corrective actions are tracked to closure in the BNL Supplier Nonconformance database.
- c. Seventeen critiques were performed at the direction of C-A ESSHQ management. All recommended actions are tracked to closure in the C-A Family ATS.

## 2. EMS, OSH and SA

- a. The ISO 14001 and OHSAS 18001 registration audit was conducted June 19 through 23 of 2006. There were no findings for the C-A Department. ISO 14001 and OHSAS 18001 registration was maintained.
- b. The C-A Department Management Review of Occupational Safety and Health (OSH), Environmental (EMS) and Self-Assessment (SA) Management Systems was convened on November 11, 2006. The meeting agenda including discussions on the following topics:
  - ISM and Human Performance Programs in 2007
  - Performance on Objectives and Targets in 2006
  - Results of Audits, Security and Self Assessment
  - Illness/Injury performance
  - Stakeholder Concerns
  - Major OSH/EMS Improvements
  - S2 and P2 Initiatives
  - Tier 1 & Self-Evaluation Program
  - Radiological Performance
  - Environmental Performance
  - Groundwater Contamination and Controls
  - Waste Management Performance
  - Financial Investment in ESSHQ
  - Senior Manager Evaluation

Recommended actions resulting from the Management Review were documented in the 2006 Management Review Record of Decision. These action items will be incorporated into annual management plans that identify resources and responsibilities. See [C-A OPM 14.1, Environmental Management Plan for C-AD and SMD Operations](#) and [C-A OPM 14.30, OSH Management Plan for C-AD and SMD Accelerators, Experimental Areas, Shops and Offices](#). The C-A Family ATS will be used to document the status of each recommended action. (ATS 3499)

## 3. Assessments

Overall, C-AD conducted 147 internal assessments/reviews in 2006. These consisted of the annual Department Self-Assessment, annual EMS Assessment and OSH Assessment, annual Environmental Management Review, 13 QA assessments, 18 worker and supervisor self-evaluations, 36 Tier 1 inspections, 4 outdoor storage area inspections, 12 inspections of satellite-waste stations, 12 tank inspections and 52 90-Day Area inspections. Action items resulting from these internal assessments/reviews are tracked to closure in the C-A Family ATS.

### III. Summary

The audits, assessments and reviews that have occurred in FY 2006 have verified that the Collider-Accelerator Department has implemented outstanding programs and systems which support BNL's broad mission of providing excellent science and advanced technology in a safe, environmentally responsible manner. In addition, the Department continues to maintain an excellent commitment by its staff and users to the various policies and programs that the Department and Laboratory have established.

### IV. Open Action items from the FY 2006 Self-Assessment Program (ATS 3017)

The following open items from the C-A FY 2006 Self-Assessment Program will be included in the C-A FY 2007 Self-Assessment Program.

#### 3017.1.10 - Electrical Ad Hoc Committee action items

Description: Implement corrective actions in the report of the Electrical Ad Hoc Committee

a. 1425.1.7 - Update electrical distribution system one-line drawings (Open)

b. 1425.1.15 - Implement the web based LOTO data entry/tag system (Open)

History: - Update electrical distribution system one-line drawings

C-A has been updating the drawings, many are completed but much work is still required. The C-A CEE has requested a new designer to be dedicated to this task and support is dependent upon the 2007 budget. C-A is updating prints at a faster rate as part of the arc flash study.

- Implement a web based LOTO data entry and tag system.

The computer based LOTO system is in place and several groups within C-A are using the system. The system needs to be made more user friendly and additional people require training

#### 3017.1.11 - Training of Building Managers

Description: Increase the number of Building Managers trained in OSHA regulations

History: Due to other priorities, training was postponed.

#### 3017.1.14 - Installation of cap at Linac (FY 04 ROD)

Description: Place water-impermeable membranes over activated soil areas at the Linac. All caps with the exception of two minor suspect areas are in place.

History: The HEBT water stops are scheduled to be capped as per the FY06 ROD.

#### 3017.1.15 - FY 04 clean-up strategy (FY 04 ROD)

Description: Clean up the steel and other debris on Railroad Avenue, concentrate on cleaning up "Inner Mongolia," and begin to remove/replace PCB capacitors at Linac.

History: Railroad cleanup complete. Inner Mongolia cleanup complete. LINAC capacitors are 2/3 done, and C-AD plans to complete by next year.

3017.1.16 - Fire protection upgrade installation (FY 04 ROD)

Description: There should be renewed emphasis on fire protection since it impacts safety and routine operations. For example, the aging fire-alarm system is a major concern. Because some fire protection upgrades have started but are proceeding slowly, the Department should encourage Plant Engineering to use an outside supplier to install the new fire alarm system components.

History: Consultant firm Hughes has been hired by BNL and C-AD to complete Fire Hazard Analysis by the end of CY07. This process was started in 09/06. Output from the FHA's will determine the corrective actions required to comply with NFPA codes. Corrective actions will be prioritized and funding will be requested by C-AD.

3017.1.18 & 3017.2.24 - Upgrades to C-A water system (ADS# 0007) (FY 04 SA)

Description: Perform planned upgrades to C-A water systems in accordance with ADS # 0007 and track progress. This is an ongoing program that started in 2001. This program is incrementally funded and will continue for at least 3 more years with additions.

History: In lieu of modifying systems for FY06, we drained and refilled the ATR and SEM Systems to obtain significant tritium reductions. ADS#007 will continue in FY07.

3017.1.19 - g-2 plume (FY 04 SA)

Description: Work with ERD to review and determine best method to deal with g-2 tritiated plume. A Focused Feasibility Study (FFS) will be written by 2006. Long term monitoring and natural attenuation of the plume are to be expected

History: The draft Record of Decision was completed and distributed to outside BNL for review/comment. The process assures that correct decisions will be made and implemented. The public comment period has closed and the regulators are considering BNL's responsiveness to comments at this time.

3017.1.22 and 3017.2.20- Mapping Archive data on activated soils of activated soil areas

Description: Complete the archival mapping of activated soil areas. (ROD)

History: Calculations have been performed for all targets in Building 912. Progress made on calculations for the AGS Ring in FY06 but other priorities delayed completion.

3017.1.23 & 3017.3.2 - Building 912 roof

Description: Continue to promote the repair of the Building 912 roof.

History: Building 912 roof repairs will continue in FY 2007 as funding permits.

3017.2.14 - Reduce PCB's at LINAC

Description: Reduce PCB containing devices at Linac and B912 (ROD)

History: Work in building 912 to continue into FY 2007. LINAC, 928, 929 & Siemen should be completed in FY 2007.

### 3017.3.5 - Perform flash calculations

Description: Perform arc flash calculations, as per NFPA 70E, for safe work distances from electrical devices. Ensure the most pressing areas have a high priority

History: Arc flash calculations are on-going, C-AD is receiving support from BNL and an outside consultant has been hired to assist in the calculations.

### 3017.3.21 - Closeout of OSHA violations

Description: Coordinate and closeout OSHA violations with PE

History: All OSHA violations are tracked to closure in Compliance Suite. PE contacts C-AD if there is uncertainty of where or what a specific violation is. This will continue until all violations have been addressed

### 3017.3.22 - Removal of aging cable in AGS Ring

Description: Establish targets to address removal of aging cable in the AGS Ring

History: The removal of aging cable in the AGS Ring is an ongoing project. While significant progress was made during the 2006 shutdown, cable removal continues when possible. All cable pulling continues to be scheduled by the C-AD Maintenance Coordinator.

### 3017.3.23 - Prepare ERL and EBIS authorization documents

Description: Establish targets to prepare ERL and EBIS authorization documents

History: Status of authorization documents is as follows:

#### EBIS

NEPA Review, 100% complete

Internal C-AD ESH Reviews, 2007

Safety Analysis Document, 2008

Accelerator Safety Envelopes, 2008

Accelerator Readiness Reviews, 2009

DOE Approval for Commissioning, 2009

DOE Approval for Operations, 2010

#### ERL

NEPA Review, 100% complete

Internal C-AD ESH Reviews, 2007

Safety Analysis Document, December 2007

Accelerator Safety Envelopes, January 2007

Accelerator Readiness Reviews, September 2008

DOE Approval for Commissioning, November 2008

DOE Approval for Operations, December 2008

As some of the authorization documents are not due until FY 2010, this action item will be carried through each of the referenced years C-A Self Assessment Programs

3017.3.39 - Progress of existing equipment reviews for compliance with OSHA electrical safety requirements; that is, all electrical equipment is to have electrical safety review equivalent to a nationally recognized testing laboratory (NRTL) review.

Description: Evaluate and document progress of existing equipment reviews as per the 5 year Plan (NRTL Implementation Plan)

History: Existing equipment reviews are maintained in a C-AD database. By 12/2006 approximately 1500 pieces of equipment will be listed in the C-AD database. Because C-AD is using 8 Electrical Equipment Inspectors progress is better than expected. This is an ongoing project and will be tracked in the 2007 Self Assessment Program.

## Matrix from C-A FY 2006 Self-Assessment Program

<b>ASSESSMENT CRITERIA 1: Leadership Commitment and Involvement</b>		
<b>OBJECTIVE:</b> Excellence in environmental responsibility and safety in all Department operations. <p>1.1. Maintain laboratory-wide ISO 14001 and 18001 registrations and continually improve the EMS and OSH programs.</p> <p>1.2. Improve Material Handling Programs</p> <p>1.3. Streamline OSH and E Management Systems</p> <p>1.4. Reduce Injury Rates to Meet DOE Expectations</p> <p>1.5. Compliance With Requirements and Standards</p> <p>1.6. Renew Emphasis on Fire Protection Upgrades</p>		
Measures	Responsibility	Schedule/Due Date
Senior Management Evaluation convened and "Record of Decision" issued. (3017.1.1)	Associate Chair for ESSHQ	September 2006
Result: Management held on 10/11/06, Record of Decision issued on 10/19/2006.		
OSH/EMS team task list completed (3017.1.2)	Associate Chair for ESSHQ	September 2006
Result: 2006 task list completed upon issuance of Record of Decision.		
Reference section 10, Structure, Authorities, Responsibilities in <a href="#">C-A OPM 14.1, Environmental Management Plan for C-AD and SMD Operations</a> , for the complete list of tasks/measures, responsible person(s) and scheduled completion dates. <p>Reference section 10, Structure, Authorities, Responsibilities in <a href="#">C-A OPM 14.30, OSH Management Plan for C-AD and SMD Accelerators, Experimental Areas, Shops and Offices</a>, for the complete list of tasks/measures, responsible person(s) and scheduled completion dates.</p> <p style="text-align: center;">All tasks will be tracked to closure in the C-A Family Assessment Tracking System. (3017.2 and 3017.3)</p>		
<b>ASSESSMENT CRITERIA 2: Human Resource Development and Management</b>		
<b>OBJECTIVE:</b> Create a pool of talented, empowered, motivated, and goal oriented leaders/managers/workers to support and enhance the C-A competitive position within the DOE laboratory complex.		
Measures	Responsibility	Schedule/Due Date
Maintain staff training > 95% complete (3017.1.3)	C-A & SMD Training Managers	September 2006
Result: Staff training has been maintained above 95% complete. Currently at 98% complete.		
Increase employee awareness of safety through participation in multiple safety awareness initiatives and activities; e.g. senior manager observations of workers, human performance training, and safety-culture surveys (3017.1.4)	ESSHQ Division Head	September 2006
Result: C-AD continue to do quarterly awareness sessions, prepared and issued tickler card (101) to ensure this is done		

<b>ASSESSMENT CRITERIA 3: Customer Focus and Satisfaction (Customer Value)</b>		
<b>OBJECTIVE:</b> Operate the C-A facility in a manner that is responsive to C-AD internal and external customer expectations.		
Measures	Responsibility	Schedule/Due Date
Reference section 10, Structure, Authorities, Responsibilities in <a href="#">C-A OPM 14.1, Environmental Management Plan for C-AD and SMD Operations</a> , for the complete list of tasks/measures, responsible person(s) and scheduled completion dates.		
Reference section 10, Structure, Authorities, Responsibilities in <a href="#">C-A OPM 14.30, OSH Management Plan for C-AD and SMD Accelerators, Experimental Areas, Shops and Offices</a> , for the complete list of tasks/measures, responsible person(s) and scheduled completion dates.		
All tasks will be tracked to closure in the C-A Family Assessment Tracking System. (3017.2 and 3017.3)		

<b>ASSESSMENT CRITERIA 4: Process Management</b>		
<b>OBJECTIVE:</b> Establish, maintain and improve C-A processes/procedures for implementing Laboratory and organizational expectations.		
Measures	Responsibility	Schedule/Due Date
Perform assessment on the C-A implementation of the BNL Management System - Emergency Preparedness (3017.1.5) <ul style="list-style-type: none"> <li>Shelter-in-Place</li> <li>Emergency Pre-Plan Response Cards</li> </ul>	Q Group	September 2006
Result: Collider-Accelerator Department's completed FY 06 Shelter-in-Place assessments were submitted to J. Searing on 9/27/06.		
Perform assessment on the C-A implementation of the BNL Management System - Environmental Management (3017.1.6) <ul style="list-style-type: none"> <li>Regulatory Compliance</li> <li>EMS Assessments</li> <li>Management Review</li> </ul>	Q Group	Annual 3 <sup>rd</sup> quarter
Result: Collider-Accelerator Department's completed FY 06 Environmental Management System assessments in June 2006. C-A regulatory compliance performance is monitored and reported on by the C-A ECR. C-A Management Review was held on 10/11/06.		
Perform assessment on the C-A implementation of the BNL Management System - Records Management (3017.1.7) <ul style="list-style-type: none"> <li>Status of Records Inventory, Transferring Responsibility for Records</li> </ul>	Q Group	September 2006
Result: Collider-Accelerator Department's completed FY 06 Records Management System Self-Assessment Questionnaire was submitted to C. Wood on 4/14/06.		
Perform assessment on the C-A implementation of the BNL Management System - Worker Safety and Health (3017.1.8) <ul style="list-style-type: none"> <li>Lockout/Tagout</li> </ul>	Q Group	September 2006
Result: Collider-Accelerator Department's completed FY 06 Lockout/Tagout Assessment Aid was submitted on 9/27/06		

**ASSESSMENT CRITERIA 5: Business and Operational Results****OBJECTIVE:**

- 1 Design and construct new accelerator facilities in support of the BNL and national missions.
- 2 Operational
  - a) Operate and improve the suite of proton/heavy ion accelerators and beam transports used to carry out the program of accelerator-based experiments at BNL thus supporting the research mission of the laboratory's user population.
  - b) Support the experimental program including design, construction, and operation of the beam transports to the experiments plus partial support of detector and research needs of the experiments.

Measures	Responsibility	Schedule/Due Date
1. C-A Operations per <a href="#">FY06 Schedule</a> and the accelerator performance meets the operational goals as specified in the most recent Field Work Proposal. (3017.1.9)	Associate Chair, Accelerators	September 2006

Result: The FY2006 budget did not allow for any operation of RHIC as was stated in the most recent Field Work Proposal. With additional funding of \$13M a 20 week polarized proton run was made possible. During this run record luminosities and beam polarization in both the AGS and RHIC were achieved, matching or exceeding the projected values. Final machine performance for this Run-6 can be found at <http://www.agsrhichome.bnl.gov/RHIC/Runs/> and the Run-6 projections can be found at <http://www.agsrhichome.bnl.gov/RHIC/Runs/RhicProjections.pdf>

**ASSESSMENT CRITERIA 6: Compliance with Laws Regulations and Contractual Requirements****OBJECTIVE:**

1. Compliance - Achieve full compliance with applicable environmental requirements.
  - a. Consistently meet all SPDES permit limits and comply with the Liquid Effluents subject area.
  - b. Article 12 Conformance.
  - c. Improve Resource Conservation and Recovery Act (RCRA) and Radiological Waste Compliance
  - d. Meet Federal and State Air Program Requirements including reducing the use of (and eventual phase out of) Ozone Depleting Substances (ODS)
  - e. Schedule and conduct regulatory compliance assessments to evaluate compliance to applicable regulations on a three-year cycle
  - f. Participate in EPA Performance Track Program
2. Pollution Prevention - Integrate pollution prevention (P2) into work planning processes (facility design, experimental review, process assessment, work planning, etc.) and expand participation in the P2 program.
  - a. Reduce generation of hazardous, mixed, and low-level radioactive routine waste streams
  - b. Expand awareness and involvement in the BNL P2 Program. Evaluate and implement pollution prevention opportunities.
  - c. Reduce or prevent generation of non-routine waste, including spills
3. Communications - Improve communications, trust, and relationship with stakeholders on environmental programs.
4. Groundwater Protection - Fully implement groundwater protection program. Protect groundwater quality from further chemical and radiological releases, and remediate existing contaminated groundwater.

Measures	Responsibility	Schedule/Due Date
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Reference section 10, Structure, Authorities, Responsibilities in [C-A OPM 14.1, Environmental Management Plan for C-AD and SMD Operations](#), for the complete list of tasks/measures, responsible person(s) and scheduled completion dates.

Reference section 10, Structure, Authorities, Responsibilities in [C-A OPM 14.30, OSH Management Plan for C-AD and SMD Accelerators, Experimental Areas, Shops and Offices](#), for the complete list of tasks/measures, responsible person(s) and scheduled completion dates.

All tasks will be tracked to closure in the C-A Family Assessment Tracking System. (3017.2 and 3017.3)

FY 2006 Department-wide EMS targets as documented in  
OPM 14.1, Environmental Management Plan for C-AD & SMD Operations, rev 01

> All targets have been tracked to closure in the C-A Family ATS (3017.2) <

**Department-wide Target(s):**

**A. Environmental Management System (EMS):**

- Achieve ISO 14001 re-registration (ROD).
- Policy Awareness: Provide at least 1 targeted EMS Awareness initiative at the supervisor and staff level at a tool box or pre-work meeting. Focus on how a specific task interacts with the environment and the employees responsibilities for that task. Include any consequences from departure from properly carrying out the assigned task.
- Request that the Laboratory to improve management oversight of new SBMS documents. This applies to both E and OSH related Subject Areas. The former SBMS Steering Committee has been disbanded in order to speed up the process of review and publication of requirements. Request that the Laboratory to reinstate an expedited review that involves Department Chairs and Division Managers so that requirements are fully supported and understood (ROD).

**B. Compliance:**

- Conduct a review of all solvent use, specifically methylene chloride, and ensure the chemical owner and other users are aware that the substance cannot be discharged to the sanitary system.
- Review MSDS of trade name products to identify any that may have methylene chloride as an ingredient. If found, evaluate the use and disposal practices of the product.
- Evaluate effectiveness of corrective actions identified on Tank inspection forms by reviewing FY04 and FY05 tank inspection checklists for timeliness, completeness and implementation of corrective actions.
- Identify at least one legacy waste (includes lab clean outs, etc) and disposition by 9/30/06.
- Communicate Satellite Accumulation Area requirements to Hazardous Waste Generators four times per year.
- Review product use and identify one Class I or Class II Ozone Depleting Substance (ODS) and replace with a Non-ODS substitute.
- Identify suitable replacements for mercury containing devices and prepare P2 funding requests to effect replacement and disposal of non-essential mercury.

**C. Pollution Prevention:**

- Target one Department specific waste stream for reduction and put in place an action plan to reduce it.
- Submit a minimum of one pollution prevention project proposals to the P2 Council by December 15, 2005.

- Submit a minimum of one success stories and/or lessons learned to the BNL P2 program manager by September 15, 2006.
- Continue the reduction of PCB containing devices at Linac and B912 (ROD).
- Reduce the number of spills by
  - Minimize the practice of parking on non paved surfaces;
  - Hold staff and contractor meetings on reducing hydraulic oil spills from equipment by ensuring hydraulic hoses are inspected periodically;
  - Hold toolbox and staff meetings on spills associated with overfills due to thermal expansion.
- Recycle excess electronic equipment at the Superconducting Magnet Division (SMD Self-Assessment ROD).
- Drain heat transfer fluid from short coil press in building 924 (SMD Self-Assessment ROD).

**D. Communications:**

- Highlight environmental improvements in Lab-wide or Department outreach programs or publications.
- Assist the Laboratory in maintaining continuous public outreach by informing outside groups about environmental success stories concerning the C-AD facilities (ROD).
- Assist the Laboratory in promoting positive aspects of the environmental successes at C-AD to the CAC and BER (ROD).

**E. Groundwater Protection:**

- Design, operate, and maintain facilities in a manner that is protective of groundwater quality.
- Archive data on activated soils (ROD).
- Ensure the Focused Feasibility Study (FFS) being developed for 2006 for the regulators addresses the sampling required to monitor the g-2 plume in future years, and that the overall strategy is to reduce the sampling frequency commensurate with residual risk from the plume (ROD).

**F. Enhance Natural And Cultural Resource Management Program:**

- Specify the use of native vegetation where feasible in landscaping around buildings.

FY 2006 Department-wide OSH targets as documented in  
OPM 14.30, C-AD/SMD OSH Management Plan for Accelerators, Experimental  
Areas, Shops and/or Offices, rev 02

> All targets have been tracked to closure in the C-A Family ATS (3017.3) <

**Department Targets** ([BNL FY06 Performance Evaluation and Management Plan, Appendix B, Performance Objective 5.1](#) and [OSH Management Review Record of Decision for 2005](#)):

**1. Implement FY05 OSH items from Management Review Record of Decision**

- Reduce injuries toward zero, DART  $\leq 0.35$  and TRCR  $\leq 0.87$
- Repair Building 912 roof
- Achieve OHSAS 18001 re-registration
- Reduce repeated types of OSHA violations. The goal is zero repeat violations
- Perform arc flash calculations, as per NFPA 70E, for safe work distances from electrical devices. Ensure the most pressing areas have a high priority
- Perform more baseline industrial hygiene surveys in FY06 as per the ISM assessment
- Remove potential sources of beryllium exposure at such as some types of non-magnetic tools
- Promote the understanding that management recognizes the principles of a just culture and that increased awareness of injury statistics must not cause workers to be reluctant to report injuries
- Review work at for physical capabilities of the worker with consideration of age of the worker, and implement ergonomic methods to reduce potential injuries
- Request the Laboratory to promote the advantages of having employees participate in periodic physicals at OMC
- Request the Laboratory to capture required physical exams and the completion of a Job Assessment Form (JAF) for each employee in the BTMS training database
- Request the OMC to use electronic forms for the JAF, including last year's data on the form
- Improve the pre-job briefing program to help reduce errors and injuries. Use Human Performance training to improve pre-job briefings so that briefings simultaneously promote less paper work, improve understanding of the tasks and create fewer errors
- Increase ESHQ productivity by streamlining management systems
- Improve housekeeping programs
- Review Skill of the Worker jobs to ensure that they are low hazard jobs
- Request the Laboratory to establish performance measures to improve fire protection and to speed fire protection improvements to provide a real commitment about fire alarm/detection upgrades
- Support the Laboratory effort to qualify Radiological Control Technicians so that they in turn may support the IH baseline work in anticipation of the ISM review in 2006 and the implementation of 10CFR851
- Request the Laboratory to ensure that Skill of the Worker job requirements as defined in SBMS are being appropriately followed by ensuring these jobs are low hazard

- Establish targets for preparation for the ISM review
- Coordinate and closeout OSHA violations with PE
- Establish targets to address removal of aging cable in the AGS Ring
- Establish targets to prepare ERL and EBIS authorization documents
- Request the Laboratory to identify, prioritize, and track OSHA violations at the lab level, especially those concerning infrastructure
- Reinforce worker involvement. For example, perform post job reviews and solicit worker feedback on work permits, institute an annual Safety Week similar to the one performed in FY05
- Improve the C-AD worker self-evaluation program by giving workers specific charges
- If 10 CFR 851 is enacted, then implement policy to address any new or modified regulatory requirements. Establish targets to comply with 10CFR851
- Request the Laboratory to combine multiple OSH related management systems into one system in order to increase productivity
- Review Facility Use Agreements (FUA's), and update as necessary

## **2. Accident/Illness Reduction**

- Explore a method that will be effective in an organization to investigate *near misses*.

## **3. Complete OSHA violations**

- Implement the system for tracking closure of identified OSHA findings that do not have funding and to track newly self-identified pre-existing conditions that are not in compliance with OSHA regulations

## **4. OHSAS 18001 Policy Awareness**

- Have employees take the OSH training course, TQ-Safeaware
- Provide at least one targeted Department-wide OSH Awareness initiative at the manager, supervisor and staff levels

## **5. Emphasize Traffic Safety**

- Promote traffic traffic-law compliance and emphasize the importance of operating vehicles safely at a toll box meeting or safety talk

## **6. Emphasize Safety Solutions Program**

- Submit two safety solution prevention project proposals to the S2 Council by January 31, 2006
- Submit success story from S2 Program funding to the BNL S2 program manager by September 15, 2006

## **7. Improve Industrial Hygiene Program Compliance**

- Participate in surveillance programs initiated at the site level to ensure that the safe work practices are in place for particularly hazardous chemical substances
- Support the closure of relevant IH Assessment Corrective Action Plan Actions assigned to C-AD/SMD.

**8. Implementation of NRTL Program**

- Complete training of organization level NRTL SMEs
- Evaluate and document progress of existing equipment reviews as per the 5 year Plan
- Involve SME in Experimental Reviews and new Project Designs involving affected electrical equipment

**9. Improve Communications**

- Submit occupational safety & health examples to the lessons learned program